


PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 4391PTWO/Ag/la	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/EP2004/052440	International filing date (<i>day/month/year</i>) 05.10.2004	Priority date (<i>day/month/year</i>) 07.10.2003	
International Patent Classification (IPC) or national classification and IPC B29C45/42, B29B11/08, B29C45/72, B29C49/42			
Applicant S.I.P.A. SOCIETA INDUSTRIALIZZAZIONE ...			
1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of 6 sheets, including this cover sheet. 3. This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau) a total of 2 sheets, as follows: <input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).			
4. This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the opinion <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input checked="" type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application			
Date of submission of the demand 25.07.2005		Date of completion of this report 04.10.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Ingelgard, T. Telephone No. +49 89 2399-7249	



**INTERNATIONAL PRELIMINARY REPORT
 ON PATENTABILITY**

International application No.
 PCT/EP2004/052440

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
 - ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

Description, Pages

1-17 as originally filed

Claims, Numbers

1-10 received on 05.09.2005 with letter of 31.08.2005

Drawings, Sheets

1/22-22/22 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
 - ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
 4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-10
	No: Claims	
Inventive step (IS)	Yes: Claims	1-10
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Re Item V.

5.1 The document EP1106324 is regarded as being the closest prior art to the subject-matter of claims 1 and 10, and shows:

A device for extracting plastic preforms provided a first portion having a predetermined transversal dimension and a second adjacent portion having a transversal dimension greater than the first portion, the device comprising a supporting structure gripping means suitable to extract the preforms from conditioning cavities, and;

A process for extracting a plurality of plastic preforms from their conditioning cavities by means of the device as claimed in claim 1 wherein there is provided a plate with straight and parallel slits having first wider sections and second sections with tooth-shaped constrictions, wherein, when the plastic preforms reach a predefined consistency the extraction process starts with the following step:

a) nearing the conditioning cavities containing the plastic preforms (5) to the extracting device.

The subject-matter of claims 1 and 10 differ from the known device and method in that
- there is provided a plate fixed to the supporting structure and incorporating gripping means, which comprise a plurality of straight slits parallel to a predefined direction (D), wherein each slit is provided with first sections of a first predetermined width (L1) and second sections forming constrictions of a second predetermined width (L2), wherein the second predetermined width (L2) is smaller than the transversal dimension of the second portion of the preform and greater than the dimensions of the first portion of the preform, whereby the first width (L1) is such to allow the second portion of the preforms to fit into the slit, and the second width is such not to allow the second portion of the preforms to fit into the slit, wherein there are provided control and operating means to make the plate move in said direction (D) by a predefined length, whereby the preforms are hooked by the plate and extracted from the conditioning cavities by reciprocally moving away the plate from the conditioning cavities; and

- in that there are further provided the steps

b) inserting the preforms into the slits by making the second wider portion of the preforms enter the wider sections of the slits,

c) translating the plate by a predetermined length in the direction (D) until the wider portion of the plastic preforms comes into contact with the tooth shaped constrictions which fit into

a space between the second portion and the first portion of the preforms , so as to hook the preforms into the plate,

d) moving away the plate from the conditioning cavities reciprocally to extract the preforms from the conditioning cavities.

The subject-matter of claims 1 and 10 is therefore new (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as how to provide a solution for gripping the preforms and expelling them in a simple way, instead of using movable clamping strips and pressurised air, as suggested in EP1106324.

The solution to this problem proposed in claims 1 and 10 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reason:

~~A possible combination with the design of the gripping means used in EP1106324 and in~~
document US6391244 would also not lead to the solution of the present application, as pressurised air would still be needed.

5.2 Claims 2-9 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

Re Item VII.

7.1 According to the requirements of Rule 10.2 PCT, the terminology shall be consistent throughout the application. This requirement is not met in view of the use of the expressions in the claims compared to the corresponding parts of the description (ie the statement of the invention). Preferably exactly the same terminology is used everywhere. If possible this terminology should correspond to the terminology used in the priority documents if not leading to clarity problems.

7.2 Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents EP1106324 and US6391244 is not mentioned in the description, nor are these documents identified therein.

7.3 Claim 2 claims a preform not a device. The claim 2 should have been deleted and the

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(SEPARATE SHEET)**

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features of claim 2 describing the preform should have been added to claim 1, line 1 and to claim 10, line 1. The rest of the claims 1 and 10 should have been adapted accordingly.

7.4 Reference sign (9) seems to be missing in the drawings.